

Abstract

Disclosed is a peptide trimer in which three peptides of the same chain length having a repeating unit as a fundamental structure represented by the formula:

$$-(\text{-Gly-X-Y-})-$$

wherein X and Y each represent any amino acid residue are tethered to one another such that they are shifted relative to one another in the backbone direction. The peptide trimer is capable of forming a polypeptide having a collagen-like triple helix structure. A method of producing the peptide trimer of the invention and a collagen-like molecular aggregate having a triple helix structure comprised of the peptide trimer unit of the invention are also provided.